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L3: Entry 1 of 1 File: USPT May 7, 2002

US-PAT-NO: 6385596
DOCUMENT-IDENTIFIER: US 6385596 B1

TITLE: Secure online music distribution system

DATE-ISSUED: May 7, 2002

INVENTOR-INFORMATION:

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FIELD-OF-SEARCH: 705/1, 705/24, 705/27, 705/26, 705/51, 705/52, 705/56, 705/57, 395/200.3, 395/200.31, 395/200.32, 395/200.33, 395/200.1, 395/200.06, 395/610, 380/3, 380/4, 380/21, 380/30, 380/5, 380/278, 380/282, 380/200, 380/201, 364/403, 364/479.04, 364/479.07, 369/84, 709/200, 709/201, 709/202, 709/203, 709/217, 700/234, 700/237

PRIOR-ART-DISCLOSED:

U.S. PATENT DOCUMENTS

Search Selected | Search ALL

	PAT-NO	ISSUE-DATE	PATENTEE-NAME	US-CL
☐	4747139	May 1988	Taaffe	380/44
☐	4817140	March 1989	Chandra et al.	705/55
☐	5003410	March 1991	Endoh et al.	360/60
☐	5033084	July 1991	Beecher	705/56
☐	5034980	July 1991	Kubota	713/189

☐	5155768	October 1992	Matsuhara	463/29
☐	5191573	March 1993	Hair	369/84
☐	5199066	March 1993	Logan	713/200
☐	5418713	May 1995	Allen	364/403
☐	5592651	January 1997	Rackman	711/163
☐	5621796	April 1997	Davis et al.	380/24
☐	5623547	April 1997	Jones et al.	380/24
☐	5636276	June 1997	Brugger	380/4
☐	5661799	August 1997	Nagel et al.	705/52
☐	5673316	September 1997	Auerbach et al.	380/4
☐	5675734	October 1997	Hair	395/200.01
☐	5677953	October 1997	Dolphin	705/51
☐	5715314	February 1998	Payne et al.	705/78
☐	5724424	March 1998	Gifford	705/79
☐	5734823	March 1998	Saigh et al.	395/200.06
☐	5734891	March 1998	Saigh	395/610
☐	5742845	April 1998	Wagner	710/11
☐	5745568	April 1998	O'Connor et al.	705/56
☐	5754649	May 1998	Ryan et al.	380/203
☐	5757907	May 1998	Cooper et al.	705/52
☐	5778421	July 1998	Nagano et al.	711/115
☐	5790677	August 1998	Fox et al.	380/24
☐	5794217	August 1998	Allen	705/27
☐	5809144	September 1998	Sirbu et al.	705/53
☐	5857021	January 1999	Kataoka et al.	705/54
☐	5889860	March 1999	Eller et al.	380/4
☐	5892900	April 1999	Ginter et al.	713/200
☐	5900564	May 1999	Kurakake	84/477R
☐	5910987	June 1999	Ginter et al.	785/52
☐	5915019	June 1999	Ginter et al.	705/54
☐	5917912	June 1999	Ginter et al.	713/187
☐	5920861	July 1999	Hall et al.	707/9
☐	5943422	August 1999	Van Wiet et al.	705/54
☐	5949876	September 1999	Ginter et al.	705/80
☐	5982891	November 1999	Ginter et al.	705/54
☐	6005939	December 1999	Fortenberry et al.	705/76 X
☐	6061448	May 2000	Smith et al.	380/282
☐	6112181	August 2000	Shear et al.	705/1

☐	6138119	October 2000	Hall et al.	707/9
☐	6157721	December 2000	Shear et al.	380/255
☐	6185683	February 2001	Ginter et al.	713/176
☐	6189098	February 2001	Kaliski, Jr.	713/168
☐	6236971	May 2001	Stefik et al.	705/1
☐	6237786	May 2001	Ginter et al.	213/153
☐	6240185	May 2001	Van Wie et al.	380/232
☐	6253193	June 2001	Ginter et al.	705/57

FOREIGN PATENT DOCUMENTS

FOREIGN-PAT-NO	PUBN-DATE	COUNTRY	US-CL
0 309 298	March 1989	EP	
0 756 279	January 1997	EP	
WO 97/44736	November 1997	WO	

OTHER PUBLICATIONS

Atwood, Brent, "Liquid Audio gets Dolby license", Aug. 31, 1996; Billboard; New York; vol. 108, Issue 35, 3 pages.*
Blaze et al., "Decentralized Trust Management," originally published in Proc. IEEE Conference on Security and Privacy, Oakland, CA, May 1996.
Schneier and Kelsey, "Cryptographic Support for Secure Logs on Untrusted Machines," The Seventh USENIX Security Symposium Proceedings, USENIX Press, Jan. 1998, pp. 53-62.
Digital River, "Marketing Software on the Internet: A White Paper," Printed from website http://www.digitalriver.com/.
Digital River, "Technology Solutions to Electronic Transactions: A White Paper," Printed from website http://www.digitalriver.com/.
Digital River, "Fraud Prevention Technology," Printed from website http://www.digitalriver.com/.
One-page printed papers from website http://www.digitalriver.com/ on Digital River's "Mission," "Technology," "Security," "Privacy," and "How It Works".

ART-UNIT: 2131

PRIMARY-EXAMINER: Sough; Hyung-Sub

ATTY-AGENT-FIRM: Ivey; James D.

ABSTRACT:

A computer implemented online music distribution system provides for the secure delivery of audio data and related media, including text and images, over a public communications network. The online music distribution system provides security through multiple layers of encryption, and the cryptographic binding of purchased audio data to each specific purchaser. The online music distribution system also provides for previewing of audio data prior to purchase. In one embodiment, the online music distribution system is a client-server system including a content manager, a delivery server, and an HTTP server, communicating with a client system including a Web browser and a media player. The content manager provides for management of media and audio content, and processing of purchase requests. The delivery server provides delivery of the purchased media data. The Web browser and HTTP server provide a communications interface over the public network between the content manager and media players. The media player provides for encryption of user personal information, and for decryption and playback of purchased media data. Security of purchased media data is enhanced in part by the use of a personal,

digital passport in each media player. The digital passport contains identifying information that identifies the purchaser, along with confidential information, such as credit card number, and encryption data, such as the media player's public and private keys. The media player encryption data is used to encrypt purchased media data, which is decrypted in real time by the media player. The media player also displays confidential information, such as the purchaser's credit card number, during playback.

25 Claims, 29 Drawing figures

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TITLE: Secure online music distribution system

US Patent No. (1):
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Detailed Description Text (141):
When a received media data file 200 is to be played back 964 (either immediately or at a later time), the consumer's passphrase is entered. The media player 116 extracts the encrypted registration key 420 from the passport 400 and decrypts it with the passphrase. The media player 116 then extracts the encrypted private key 412 from the passport 400 and decrypts it with the registration key 420. The media player 116 then decrypts the media key with the consumer's private key 412. Finally, the media key is then used to decrypt the audio image 208 in real-time as the media is played.